Run MPsrch_pp on: protein Tue Apr 25 13:48:45 2000; MasPar time 24.38 Seconds 834.844 Million cell updates/sec protein database search, using smith

Tabular output not generated.

Title: Description: Perfect Score: (1-1571) from US08956991A.pep 11189 >US-08-956-991-11

Sequence: 1 MWILALSLFQSFANVFSEDL.....ISAGCAEKQAKEAARCKEFS 1571

РАМ 150 Gap 11 131253 seqs, 12956647 residues

Scoring table:

Post-processing: Minimum Match 0% Listing first 45 summaries

Database: a-issued 1:5A_COMB 2:5B_COMB 3:PCT9_COMB 4:backfiles1

Statistics:

Mean 38.265; Variance 226.750;

scale 0.169

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

1 5 5 6 6 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Result
2081 2071 740 629 629 606 606 606 608 448 486 448 391 391 379 379 379 379 379 379 379	Score
188 6.68 6.68 6.68 6.68 6.68 6.68 6.68 6	% Query Match
465 462 1447 1018 1018 1018 1018 1018 1019 11911 1911	Length
	BB
US-08-752- US-08-448-0 US-08-448-0 US-08-408-0 US-08-49-1 US-08-348-0 US-08-348-1 US-08-752-1	ID
Sequence 5, Sequence 6, Sequence 6, Sequence 2, Sequence 5, Sequence 5, Sequence 5, Sequence 11, Sequence 11, Sequence 11, Sequence 11, Sequence 12, Sequence 12, Sequence 13, Sequence 13, Sequence 13, Sequence 11,	Description
Applicatio	1 1 1 1 1 4 1 1 1 9
1.19e-136 8.27e-41 4.68e-33 4.68e-33 4.68e-33 1.86e-31 1.86e-29 6.80e-29 6.80e-29 6.80e-29 3.52e-23 3.52e-23 3.52e-23 3.52e-23 1.18e-20 1.38e-20 1.38e-20 1.38e-20 1.00e-16 6.42e	Pred. No.

45	44	43	42	41	40	39	38	37	36	3 5	34	ω ω	32	31	30	29	28	27	26	25	24
229	229	234	232	232	234	235	235	235	235	235	233	262	262	252	262	262	262	282	326	326	320
2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1		2.1				2.3							
304	287	828	574	549	419	338	338	315	310	287	252	2446	2446	2386	2327	2324	2324	2231	869	869	868
2	Ν	۳	Ν	N	H-4	٠.	ν	N	N	2	N	ω	N	N	4	w	-	٢	2	⊢	2
US-08-414-	US-08-414-	US-08-261-	US-08-836-	US-08-836-	5169835-2	US-08-414-	US-08-414-	US-08-414-	US-08-414-	US-08-414-	US-08-414-	PCT-US93-1	US-08-551-	US-09-016-	5455158-1	PCT-US95-0	US-08-283-	US-08-153-	US-08-644-	US-08-374-	US-08-644-
Sequence	Sequence	Sequence	Sequence	Sequence	Patent No.	Sequence	Patent No.	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence								
44	48	2,	21	11		42	43	47	45	49	57,	2	2	12,		ب -	,	16,	29,	16,	,-
, Applicati	, Applicati	Applicatio	Applicati	Applicati	5169835.	Applicati	Applicati	Applicati	Applicati	Applicati	Applicati	Applicatio	Applicatio	Applicati	5455158.	Applicatio	Applicatio	Applicati	Applicati	Applicati	Applicatio
4.29e-06	4.29e-06	2.07e-06	2.77e-06	2.77e-06	2.07e-06	Ф	1.79e-06	1.79e-06	1.79e-06	1.79e-06	2.39e-06	3.35e-08	3.35e-08	3.35e-08	3.35e-08	3.35e-08	3.35e-08	. 70e	2.19e-12	.19e	5.46e-12

ALIGNMENTS

US-08-752-307B-5 Sequence 5, Application US/08752307B XXXXXX Patent No. Sequence 5, Application US/08752307B Patent No. 5952171 FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Meiklejohn, Ph.D., Anit
REGISTRATION UNMBER: 35,283
REFERENCE/DOCKET NUMBER: 0940
TELEOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5970
TELEFAX: 617-542-8906
TELEX: 200154
TELEX: 200154 GENERAL INFORMATION: INFORMATION FOR SEQ ID NO: APPLICATION NUMBER: US/08/752,307B FILING DATE: 19-NOV-1996 CLASSIFICATION: 435 PRIOR APPLICATION DATA: APPLICATION NUMBER: COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95 CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street APPLICANT: McCarthy, Sean A.
APPLICANT: Gearing, David P.
APPLICANT: Levinson, Douglas A.
TITLE OF INVENTION: METHOD FOR IDENTIFYING GENES
TITLE OF INVENTION: ENCODING NOVEL SECRETED OR MEMBRANE-ASSOCIATED PROTEIN SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA: SEQUENCE CHARACTERISTICS: NUMBER OF SEQUENCES: COUNTRY: 02110-2804 Boston MA US STANDARD; 5 09404/020001 Anita L. PRT; 465 AA.

```
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               888888
                                                                                                                                                                                                                                                                                                                                                                                              δÕ
                                                                                                                                                                                                                                                                                                                                                                                                                   DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                            дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                   XXXXX
                                                                                                                                                                                                                                                                                                         US-08-752-307B-7
                                                                                                                                                                                                                                     Sequence 7, Application US/08752307B
                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                       Sequence 7, Application Patent No. 5952171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Match 18.6%;
Local Similarity 57.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MWLVTFLLLLDSLHKARPEDVGTSLYFVNDSLQQVTFSSSVGVVVPCPAAGSPSAALRWY
                                                                                                                                                                               GENERAL INFORMATION: APPLICANT: McCart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino a TOPOLOGY: lin MOLECULE TYPE: FRAGMENT TYPE:
                                                                                                                                  APPLICANT: McCarthy, Sean A.
APPLICANT: Gearing, David P.
APPLICANT: Levinson, Douglas A.
TITLE OF INVENTION: METHOD FOR IDENTIFYING GENES
TITLE OF INVENTION: ENCODING NOVEL SECRITED OR MEMBRANE-ASSOCIATED
                 COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson,
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                          QRVELPCKALGHPEPDYRWLKDNMPLELSGRFQKTVTGLLIENIRPSDSGSYVCEVSNRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HTVELPCTASGYPIPAIRWLKDGRPLPADSRWTKRITGLTISDLRTEDSGTYICEVTNTF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GLYISDVQKEDALSTYRCITKHKYSGETRQSNGARLSVTDPAESIPTILDGFHSQEVWAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AVLREPYTVRVEDQKTMRGNVAVFKCIIPSSVEAYITVVSWEKDTVSLVSGSRFLITSTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AVFREDYTVRVEDORSMRGNVAVFKCLIPSSVOEYVSVVSWEKDTVSIIPENRFFITYHG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LATGDDIYDVPHIRHVHANGTLQLYPESPSAENSFIHDNDYECTAENAAGKIRSPNIRVK 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                VRITGINHENLIMDHMVKSDGGAYQCFVRKDKLSAQDYVQVVLEDGTPKIISAFSEKVVS
                                                                                                                                                                                                                                                                                                                                                                                                                    ISIRGLSNETLLITSAQKSHSGAYQCFATRKAQTAQDFAIIALEDGTPRIVSSFSEKVVN 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GSAEATGILMVIDPLHVTLTPKKLKTGIGSTVILSCALTGSPEFTIRWYRNTELVLPDEA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LATGEETYDVPGIRHVHPNGTLQIFPFPPSSFSTLIHDNTYYCTAENPSGKIRSQDVHIK 119
                                                                                                                                                                                                                                                                                                                                                     PAEPVSLMCNVKGTPLPTITWTLDDDPILKGGSHRISQMITSEG
                                                                                                                                                                                                                                                                                                                                                                           PGEQFSLMCAAKGAPPPTVTWALDDEPIVRDGSHRTNQYTMSDG 464
                                                                STREET: 225 F
CITY: Boston
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    265;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH:
 COMPUTER: IBM CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NT TYPE: internal
465 AA; 51210 MW; 1158127 CN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         465 amino acids amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
  IBM Compatible
SYSTEM: Windows95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein
                                                                                                                                                                                                                                                                                                          STANDARD;
                                                                                                                                                                                                                  US/08752307B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Pred.
105; |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 2081; DB 2; I
Pred. No. 1.19e-136;
105; Mismatches 93;
                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                      ъ.
С
                                                                                                                                                                                                                                                                                                             462
                                                                                                                                                                                                                                                                                                             Ą
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 465;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                         463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        239
                                                                                                                                          PROTEIN
```

```
888888888888888888888888888888888888
RESULT
XX XX
AC XX
AC XX
AC XX
CCC
CCC
CCC
                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                          QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                Qy
                                                                                                                                                                                                                         Вp
                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                        δÕ
                                                                                                                                                                             Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                            Sequence
                                                                                         XXXXXX
                                                                                                              PCT-US94-05277-2
                                                                                                                                                         420
                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                          361
           Sequence 2, Application PC/TUS9405277 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                     61 LATGDDIYDVPHIRHVHANGTLQLYPESPSAFNSFIHDNDYECTAENAAGKIRSPNIRVK 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MWLVTFLLLLDSLHKARPEDVGTSLYFVNDSLQQVTFSSSVGVVVPCPAAGSPSAALRWY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
APPLICATION MARKER: US/08/752,307B
FILING DATE: 19-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER: 35,283
REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 462 amino acid
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                VRITGINHENLIMDHMVKSDGGAYQCFVRKDKLSAQDYVQVVLEDGTPKIISAFSEKVVS
                                                                                                                                                                                                                        ISIRGLSNETLLITSAQKSHSGAYQCFATRKAQTAQDFAIIALEDGTPRIVSSFSEKVVN
                                                                                                                                                                                                                                                                                                                                                                                  AVLREPYTVRVEDQKTMRGNVAVFKCIIPSSVEAYITVVSWEKDTVSLVSGSRFLITSTG
                                                                                                                                                                                                                                                                                                                                                                                            AVFREPYTVRVEDQRSMRGNVAV9KCLIPSSVQEYVSVVSWEKDTVSIIPENRFFITYHG
                                                                                                                                                                                                                                                                                                                                                                                                                            PAEPVSLMCNVKGTPLPTITWTLDDDPILKGGSHRISQ
                                                                                                                                                                               PGEQFSLMCAAKGAPPPTVTWALDDEPIVRDGSHRTNQ 458
                                                                                                                                                                                                                                               GTAKVIGRLYVKOPLKATISPRKVKSSVGSQVSLSCSVTGTEDQELSWYRNGEILNPGKN
                                                                                                                                                                                                                                                                    GSAEATGILMVIDPLHVTLTPKKLKTGIGSTVILSCALTGSPEFTIRWYRNTELVLPDEA
                                                                                                                                                                                                                                                                                           QRVELPCKALGHPEPDYRWLKDNMPLELSGRFQKTVTGLLIENIRPSDSGSYVCEVSNRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  263;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            h 18.5%;
Similarity 57.4%;
                                           2, Application PC/TUS9405277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LE TYPE: protein
462 AA; 50937 MW; 1144658 CN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Meiklejohn, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative 104; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           462 amino acids
                                                                                                              STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 2071; DB 2;
Pred. No. 6.27e-136;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Anita
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09404/020001
                                                                                                               PRT;
                                                                                                              1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90;
                                                                                                                                                           457
                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 462;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                     179
                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                          239
                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                               299
```

۲.

```
В
                                                                                                                                                                                                                                                οy
                                                                                                                                                                                                                                                                              Дb
                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                     밁
                                    Ş
                                                               В
                                                                                     δõ
                                                                                                                B
                                                                                                                                         å
                                                                                                                                                                     망
                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                           535 IKWYKNS-NL-LPFNHRQVAFENNGTL--K-LSDVQKEVDEGEYTCNV-LVQPQLSTSQS 588
                                                                                                                                                                                                                                                                                                                                  132
                                                                                                                                                                                                                                                     647
                                                                                                                                                                                                                                                                               190
                                                                                                                                                                                                                                                                                                       589 VHVTVKVP-PFIQPFE-FPRFSIGQRVFIPCVVVSGDLPITITWQKDGRPIPGSLGVTID
              474
                                                                                                                                                                      304
                                                                                                                                                                                                                           250
                                                                                                                                                                                                                                                                                                                                                                                    72 IKWKKDGIHLALGMDERKQQLSNGSLLIQNILHSRHHKPDEGLYQCEASLGDSGSIISRT 131
                                                                                                                    362
                                                                                                                                              760
                                                                                                                                                                                                 700
                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX: 197430 BBMB UT INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Kagan, Sarah A.
REGISTRATION NUMBER: 32,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE:
ENCE 1447 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202.508.9100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                               AKVAVAGPLRFLSOTESVTAF-MGDTVLLKCEVIGEPMP-TIHWQKNQQDLTPIPGDSRV 189
                                                                                                                                                                     DSGMYTCVVTYK-NENISASAELTVLVPPWFLNHPSNLYAYESMDIFFECTVSG-KPVPT
                                                                                                                                                                                                             NIDFTSSLRISNLSLMHNGNYTCIARNEAAA-VEHQSQL-IVRVP--PK--FVVQ-PRDQ
                                                                                                                                                                                                                                                                              VVLPSGALQISRLQPGDIGIYRCSARNPASSRTGNEAEVRILSDPGLHRQLYFLQRPSNV 249
                                                                                                                  VNWMKNGDVVIPS-D-YF-QI--VGG---SNLRILGVVKSDEGFYQCVAENEAGNAQTSA 413
                                                                                                                                                                                               DGIYGKAVILNCSAEGYPVPTIVWKFSKGAGVPQFQPIALNGRIQVLSNGSLLIKHVVEE
 ERALNTTOPGS-LQ-LTVGNLKPEAMYTFRVVAYNEWGPGESSOPIKVATOPELQVPGPV 531
                                     QLTVQEP--PDP---PEI--EIKDV--KARTITLRWIMGFDGNSPITGYDIECKNKSDSW
                                                               QLIVPKPAIPSSSVLPSAPRDVVPVLVSSRFVRLSWRPPAEAKGNIQTFTVFFSREGDNR 473
                                                                                         VRWEKEDRIINPEMARYLVSTKEVGEEVISTLQILPTVREDSGFFSCHAINSYGEDRGII
                                                                                                                                             DSGYYLCKVSNDVGADVSKSMYLTVKIPAMITSYPNTTLATQGQKKEMSCTAHGEKPI-I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: PCT/US94/05277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    D.C
                                                                                                                                                                                                                                                                                                                                                                                                               6.6%; Score 740; DB 3; Length 1447; larity 29.4%; Pred. No. 8.27e-41; Conservative 179; Mismatches 295; Indels 70;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E: Banner, Birch, McKie & Beckett
1001 G Street, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1447 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Zabrecky, James R.
VENTION: Antibodies Specific for DCC Gene Product
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Jarosz, David E.
Johnson, Karen
Kinzler, Kenneth W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Vogelstein, Bert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PE: protein
AA; 158455 MW; 11668854 CN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             202.508.9299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Floppy disk
32,141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01107.42709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                            929
                                                                                                                                                                                                                                                          699
```

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 6, Application US/08408093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            XXXXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-408-093-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    930 DSAQRTKDVSPQLNSATIIDIHPSSTYSIRMYAKNRIGKSEPSNELTITAD-EAAPDGPP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 6, Application Patent No. 5688916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL .NFORMATION:
                                                                                   INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                               ATTORNEY AGENT INFORMATION:
NAME: Fugit, Donna R.
REGISTRATION NUMBER: 32,1:
REFERENCE/DOCKET NUMBER: 1
NFORMATION FOR SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            YKLEGLKKFTEYSLRFLAYNRYGPGVSTDDITVVTLSDVPSAPPQNVSLEVVNSRSIKVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ENLQAVSTSPTSILITWEPPA-Y-ANGPVQGYRLFCTEVSTGKE-Q-NI-EVD--GLS--
                          MOLECULE TYPE:
ORIGINAL SOURCE
                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/040,741
FILING DATE: 26 MAR 1993
                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Human Cell Adhesion Molecule and TITLE OF INVENTION: Acid Sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TV-F-CSHPYPTVISEFEASPDSFSYRIPNLSRNRQYSVWVVAVTSAGRG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TVNGTGPPSNWYTAETPENDLDESQVPDQPSSLHVRPQTNCII-MSWTPPLNPNIVVRGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WSTLSKEALNGILQGFRVIYWANLMDGELGEIKNITTTQPSLELDGLEKYTNYSIQVLAF 1168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WLPPPSGTQNGFITGYKIRHRKTTRRGEM-ETLE-PNNLWYL-FTGLEKGSQYSFQVSAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     YTLDNLNKFTQYGLVVQACNRAGTGPSSQEIITTTLEDVPSYPPENVQAIATSPESISIS 1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QEVHLEPISSQSIRVTWKAPKKHLQNGIIRGYQIGYREYSTGGNFQFNIISVDTSGDSEV 1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TRAGDGVRSE--QIFTRTKE-D---VPGPPAGVKAAAASASMVFVSWLPPLKLNGIIRKY
ORGANISM: FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IIGYGVGSPYAETVRV-DSK-QRY-YSIERLESSSHYVISLKAFNNAGEG
                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0
                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Richard J. Rodrick, ADDRESSEE: and Company
                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                           APPLICATION NUMBER: US/08/408,093 FILING DATE: 21-MAR-1995
                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                               STREET:
                                                  TOPOLOGY:
                                                                         LENGTH:
                                                                                                                                                                                                                                                                                                               07417
                                                                                                                                                                                                                                                                                                                                                  Franklin Lakes
                                                            amino acid
                                                                                                                                                                                                                                                                                                                                      Z
                                                                                                                                                                                                                                                                                                                                                                One Becton Drive
                                                                          1018 amino acids
                                                                                                                                                                                                                                                                                                                            USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hemperly,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Reid, Robert A
                                                                                                                                                                                                                                                 PatentIn Release #1.0, Version #1.25
                                                 linear
                                    protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/08408093
                                                                                                                                                                                                                                                                                                                                                                                                                                                    John J
                                                                                                                         32,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                        Becton Dickinson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                805
                                                                                                                                                                                                                                                                                                                                                                                                                                            Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  699
```

```
FEATURE:

NAME/KEY: Modified-
LOCATION: 238
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION:
FEATURE:
NAME/KEY:
LOCATION:
FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:

NAME/KEY:

LOCATION:

FEATURE:

NAME/KEY:
LOCATION: 453
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
FEATURE:
NAME/KEY: Modified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER
OTHER
OTHER
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION:
FEATURE:
NAME/KEY:
                                                                                                                               FEATURE:

NAME/KEY: Modified-site

rocation: 437

//ab
                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: Domain
LOCATION: 809.857
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                         NAME/KEY: Modified-
LOCATION: 318
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                              LOCATION: 188
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: Domain
LCCATION: 905..952
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 604..657
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                 LOCATION: 437
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                      EATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY:
                                                                NAME/KEY: Modified-site LOCATION: 453
                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION: INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Domain
707..760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disulfide-bond
45..94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disulfide-bond
243..290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disulfide-bond
138..191
                                                                                                                                                                                                                 Modified-site
                                                                                                                                                                                                                                                                                          Modified-site 238
                                                                                                                                                                                                                                                                                                                                                                    Modified-site 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disulfide-bond 506..563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   416..464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disulfide-bond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disulfide-bond 332..371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Domain
  Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /label= FLR
/note= "conserved
III-like repeat"
                                                                                                                                                                                                                                                   /label= ASN-glycos
/note= "potential:
glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /label= FLR
/note= "conserved
III-like repeat"
                       /label= ASN-glycos
/note= "potential site
glycosylation"
                                                                                                 /label= ASN-glycos
/note= "potential site
glycosylation"
                                                                                                                                                                         /label= ASN-glycos
/note= "potential site
glycosylation"
                                                                                                                                                                                                                                                                                                                           /label= ASN-glycos
/note= "potential site of ASN-linked
glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                                     /label= FLR
/note= "conserved
III-like repeat"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /label= FLR
/note= "conserved
III-like repeat"
                                                                                                                                                                                                                                                                   site
                                                                                                                                                                                                                                                                                                                                                                                                                      core
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                core
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        core
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  core of
                                        of.
                                                                                                                 0f
                                                                                                                                                                                         of.
                                                                                                                                                                                                                                                                   of
                                                                                                                                                                                                                                                                                                                                                                                                                      of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        fibronectin
                                                                                                                 ASN-linked
                                                                                                                                                                                         ASN-linked
                                                                                                                                                                                                                                                                                                                                                                                                                      fibronectin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                fibronectin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ibronectin
                                                                                                                                                                                                                                                                   ASN-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              type
```

```
Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                                        Dр
                                                                                                                                                                                                                                                                                                                                             Ωy
                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                      8
                                                                           8
                                                                                                       맑
                                                                                                                              δð.
                                                                                                                                                           g
                                                                                                                                                                                                               Ф
                                                     멅
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                            1093
                                                                              1033
 869
                                                                                                         754
                                                                                                                                  974
                                                                                                                                                            695
                                                                                                                                                                                       916
                                                                                                                                                                                                                                           857
                                                                                                                                                                                                                                                                    575
                                                                                                                                                                                                                                                                                               799
                                                                                                                                                                                                                                                                                                                         516
                                                                                                                                                                                                                                                                                                                                                   739
                                                                                                                                                                                                                                                                                                                                                                            458
                                                                                                                                                                                                                                                                                                                                                                                                        682
                                                                                                                                                                                                                                                                                                                                                                                                                                 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                            622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 PADIVVQFKDVYALMGQNVTLECFALGNPVPDIRWRKVLEPMP-STAEIS-TSGAVLKIF 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5.6%;
Local Similarity 25.0%;
Nes 198; Conservation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCATION:
OTHER INFC
OTHER INFC
OTHER INF
OTHER INF
FEATURE:
VAME/KEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION: 501
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
FEATURE:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                    PASIR-PMKNITAIAGRDTYIHCRVIGYPYYSIKWYKNSNLLPFNHRQVAFENNGTLKLS
                                                                                                                                                                                    TGYDIECKNK-SDSWDSAQRTKDV-SPQLNSATIIDIHPSSTYSIRMYAKNRIGKSEPSN
                                                                                                                                                                                                                                                         LKHAGRYTCTAQTIVDNSSASADLVVRGPPGPPGGLRIEDIRATSVALTWSRGSDNHSPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                          GDLPITITWQKDGRPIPGSLGVTIDNIDFTSSLRISNLSLMHNGNYTCIARNEAAAVEHQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KPIP-TIRWLKNGYAYH-K-G-----E----LRLYDVTFENAGMYQCIAENTYGAIYAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DVQKEVDEGEYTCNVLVQPQLSTSQSVHVTVKV-PPFIQPFEFPRFSIGQRVFIPCVVVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NIQLE-DEGIYECEA-ENIRGKDKHQARIYVQAFPEWVEHINDTEVDIGSDLYWPCVATG
                                                                           FQFNIISVDTSGDSEVYTLDNLNKFTQYGLVVQACNRAGTGPSSQEIITTTLEDVPSYPP
                                                                                                                                                                                                              SKYTIQTKTILSDDWKDAKTDPPIIEGNMEAARAVDLIPWMEYEFRVVATNTLGRGEPSI
                                                                                                                                                                                                                                                                                             ATQGQKKEMSCTAHGEKPI-IV-KWEKEDRIINPEMARYLVSTKEVGEEVISTLQILPTV
ENLLPDTQYFIEVGACNSAGCGPPSDMIEAFTKKAPPSQPPRIISSVRSGSRYIITWDHV
                         ENVQAIATSPESISISWSTLSKEALNGILQGFRVIYWANLMDGELGEIKNITTTQPSLEL
                                                 TEVGVKVLSSSEISVHWE----HVLEKIVESYQIRYWAAHDKEEAANRVQVTSQEYSARL
                                                                                                       WK-KVTVTNPDTGRYVHKDETMSPSTAFQVKVKAFNNKGDGPYSLLAVINSAQDAPSEAP
                                                                                                                                ELT-ITADEAAPDGPPQEVHLEPISSQSIRVTWKAPKKHLQNGIIRGYQIGYREYSTGGN
                                                                                                                                                           PSNRIKTDGAAPNVAPSDVGGGGGRNRELTITWAPLSREYHYGNNFGYIVAFKPFD-GEE
                                                                                                                                                                                                                                          REDSGFFSCHAINSYGEDRGIIQLTVQEPPDPPE-IEIKDVKARTITLRWTMGFDGNSPI
                                                                                                                                                                                                                                                                                                                       ITVGENATMQCAASFDPALULTFVWSFNGYVIDFNKEN-IHYQRNFMLDSNGELLIRNAQ
                                                                                                                                                                                                                                                                                                                                                   LNGRIQVLSNGSLLIKHVVEEDSGYYLCKVSNDVGADVSKSMYLTVKIPAMLTSYPNTTL
                                                                                                                                                                                                                                                                                                                                                                         -SSRILIWEDGSLEINNITRNDGGIYTCFAENNRGKANSTGT-LVITDPTRIILAPINAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: 913
OTHER INFORMATION: /label= ASN-glyco
OTHER INFORMATION: /note= "potentia
OTHER INFORMATION: 91ycosylation"
NCE 1018 AA; 113333 MW; 5493875 CN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R INFORMATION:
R INFORMATION:
R INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Modified-site 913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Modified-site 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Modified-site 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /label= ASN-glycos
/note= "potential site
glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /label= ASN-glycos
/note= "potential site of
glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /label= ASN-glycos
/note= "potential site
glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /label= ASN-glycos
/note= "potential;
glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 629; DB 1; L
Pred. No. 4.68e-33;
196; Mismatches 348;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1018;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ASN-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ASN-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ASN-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ASN-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                               1092
                                                                                                                                   1032
                                                                                                                                                                                         973
                                                                                                                                                                                                                  694
                                                                                                                                                                                                                                           915
                                                                                                                                                                                                                                                                                               856
                                                                                                                                                                                                                                                                                                                         574
                                                                                                                                                                                                                                                                                                                                                   798
                                                                                                                                                                                                                                                                                                                                                                             515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     562
```

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       XXXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-408-420A-6
                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/08/408.470^
FILING DATE:

CLASCITET IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/408.470^
FILING DATE:
CLASCITET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 6, Application US/08408420A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1211 PPLKLNGIIRKYTVFCSHPYPTVISEFEASPDSFSYRIPNLSRNRQYSVWVVAVTSAGRG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                986 VVSQVKISGAP 996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 6, Application Patent No. 5731154
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No. 5731154
GENERAL INFORMATION:
                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                         NAME/KEY:
LOCATION:
FEATURE:
                                                                                                                                                                                                               CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: FUGIT, Donna R.
REGISTRATION NUMBER: 32,135
REFERENCE/DOCKET NUMBER: P:
                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Reid, Robert A.
APPLICANT: Hemperly, John J.
TITLE OF INVENTION: Human Cell Adhr
TITLE OF INVENTION: Acid Sequences
                           FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                      ZIP: 07417
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                  MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                     LOCATION: FEATURE:
                                                                                                                                 ORGANISM: FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NSSEI-ITVEP 1280
                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ໌ ທ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VALSNESTVTGYKVLY-RPDGQHDGKL-YSTHKHSIEVP-IPRDGEYVVEVRAHSDGGDG
 NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                          STREET: One Becton DI
CITY: Franklin Lakes
STATE: NJ
                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Richard J. Rodrick, ADDRESSEE: Company STREET: One Becton Drive
                                                       LOCATION:
                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                  NAME/KEY:
                                                                                                                       NAME/KEY:
                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                       LENGTH:
                                                                                                                                                                             amino acid
                                                                                                                                                                                       1018 amino acids
                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                     linear
                                                                                   Disulfide-bond
138..191
  Disulfide-bond
416..464
                                                      Disulfide-bond
243..290
                                                                                                              45..94
                                                                                                                       Disulfide-bond
                            Disulfide-bond 332..371
                                                                                                                                          Homo sapiens
                                                                                                                                                           protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                     , John J.
Human Cell Adhesion Molecule and Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/08408420A
                                                                                                                                                                                                           6:
                                                                                                                                                                                                                     P-2630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                Becton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1018
                                                                                                                                                                                                                                                                                                                                                                                                Dickinson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A
                                                                                                                                                                                                                                                                                              #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      985
  OTHER INFORMATION: /label
OTHER INFORMATION: /note-
OTHER INFORMATION: 919cos
FEATURE:
NAME/KEY: Modified-site
LOCATION: 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER :
                           OTHER INFORMATION: FEATURE:
                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                 OTHER INFORMATION: FEATURE:
                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                             LOCATION: 188
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: Domain
LOCATION: 905..952
OTHER INFORMATION: /
                                                                                   OTHER INFORMATION: FEATURE:
                                                                                                                                                                             NAME/KEY:
                                                                                                                                                                                                                                   NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION:
OTHER INFORMATION:
                                                      NAME/KEY: modified LOCATION: 501 OTHER INFORMATION:
                                                                                                     OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                  OTHER INFORMATION:
                                                                                                                                                                                                                                                                          OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 809..857 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION:
                                                                                                                                                                                                                                                                 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY:
NAME/KEY: Modified LOCATION: 571 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                            LOCATION:
                                                                                                                                                                                                                                                                                                     NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                  LOCATION:
                                                                                                                                                                                                                                                                                                                                                            NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Domain
707..760
                                                                                                                                                                                                                                                                                                                                                                                                        Modified-site
188
                                                                                                                                                                                       Modified-site
                                                                                                                                                                                                                                      Modified-site 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disulfide-bond 506..563
           Modified-site 571
                                                                                                                                                                                                                                                                                                     Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Domain
                                                                                                                                                                               453
                                                                                                                                                                                                                                                                                                                                                   238
                                                                                                                                                                                                                                                                                                                                                           Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   604..657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Domain
                                                                          Modified-site
                                                                                                                                                                                                                                                                                                                                                                            /label= ASN-glycos
/note= "potential site of ASN-linked
glycosylation"
                                                                                                                                                                                                                                                               /label= ASN-glycos
/note= "potential site of ASN-linked
glycosylation"
                                                                                                                                                                                                                                                                                                                      glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /label= FLR
/note= "conserved core of fibronectin type
III-like repeat"
                                /label= ASN-glycos
/note= "potential
glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                                                                  /label= FLR
/note= "conserved
III-like repeat"
                                                                                                                                                 /note- "potential site glycosylation"
                                                                                                                                                                                                         glycosylation"
                                                                                                                                                                                                                  /label= ASN-glycos
/note= "potential site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /label= FLR
/note= "conserved core of fibronectin
III-like repeat"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  III-like repeat"
 /label-
                                                                                          glycosylation"
                                                                                                     /label= ASN-glycos
/note= "potential:
                                                                                                                                                                                                                                                                                                                                /label= ASN-glycos
/note= "potential si >
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /label= FLR
/note= "conserved
                                                                                                                                                                    /label= ASN-glycos
ASN-glycos
                                              site
                                                                                                      site
                                                                                                                                                                                                                                                                                                                                                                                                                                              core of fibronectin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           core of
                                              of ASN-linked
                                                                                                                                                                                                                   of ASN-linked
                                                                                                                                                                                                                                                                                                                                 of ASN-linked
                                                                                                      of ASN-linked
                                                                                                                                                             of ASN-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          fibronectin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    type
```

888888888

```
RESULT
ID U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
      US-08-714-901-6
                                                                                                                                                                                       1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                             986
                                                                                                                                                                                                                                                                                                            1033 FQFNIISVDTSGDSEVYTLDNLNKFTQYGLVVQACNRAGTGPSSQEIITTTLEDVPSYPP 109:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  504
                                                                                                                                                                                                                   869
                                                                                                                                                                                                                                                                                                                                           754
                                                                                                                                                                                                                                                                                                                                                                         974
                                                                                                                                                                                                                                                                                                                                                                                                       695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 PADIVVQFKDVYALMGQNVTLECFALGNPVPDIRWRKVLEPMP-STAEIS-TSGAVLKIF 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match 5.6%;
Local Similarity 25.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                     DGLEKYTNYSIQVLAFTRAGDGVRSEQIFTRTKEDVPGPPAGVKAAAASASMVFVSW--L 1210
                                                                                                                                                                                                                  ENLLPDTQYFIEVGACNSAGCGPPSDMIEAFTKKAPPSQPPRIISSVRSGSRYIITWDHV 928
                                                                                                                                                                                                                                                                            TEVGVKVLSSSEISVHWE----HVLEKIVESYQIRYWAAHDKEEAANRVQVTSQEYSARL 868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LKHAGRYTCTAQTIVDNSSASADLVVRGPPGPPGGLRIEDIRATSVALTWSRGSDNHSPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GDLPITITWQKDGRPIPGSLGVTIDNIDFTSSLRISNLSLMHNGNYTCIARNEAAAVEHQ 681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DVQKEVDEGEYTCNVLVQPQLSTSQSVHVTVKV-PPFIQPFEFPRFSIGQRVFIPCVVVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NIQLE-DEGIYECEA-ENIRGKDKHQARIYVQAFPEWVEHINDTEVDIGSDLYWPCVATG 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PASIR-PMKNITAIAGRDTYIHCRVIGYPYYSIKWYKNSNLLPFNHRQVAFENNGTLKLS 562
                    σ
                                                                                             VVSQVKISGAP 996
                                                                                                                            PPLKLNGIIRKYTVFCSHPYPTVISEFEASPDSFSYRIPNLSRNRQYSVWVVAVTSAGRG
                                                                                                                                                       VALSNESTVTGYKVLY-RPDGQHDGKL-YSTHKHSIEVP-IPRDGEYVVEVRAHSDGGDG 985
                                                                                                                                                                                                                                                ENVQAIATSPESISISWSTLSKEALNGILQGFRVIYWANLMDGELGEIKNITTTQPSLEL 1152
                                                                                                                                                                                                                                                                                                                                         WK-KVTVTNPDTGRYVHKDETMSPSTAFQVKVKAFNNKGDGPYSLLAVINSAQDAPSEAP 812
                                                                                                                                                                                                                                                                                                                                                                      ELT-ITADEAAPDGPPQEVHLEPISSQSIRVTWKAPKKHLQNGIIRGYQIGYREYSTGGN 1032
                                                                                                                                                                                                                                                                                                                                                                                                  PSNRIKTDGAAPNVAPSDVGGGGGRNRELTITWAPLSREYHYGNNFGYIVAFKPFD-GEE 753
                                                                                                                                                                                                                                                                                                                                                                                                                                  TGYDIECKNK-SDSWDSAQRTKDV-SPQLNSATIIDIHPSSTYSIRMYAKNRIGKSEPSN 973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SKYTIQTKTILSDDWKDAKTDPPIIEGNMEAARAVDLIPWMEYEFRVVATNTLGRGEPSI 694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REDSGFFSCHAINSYGEDRGIIQLTVQEPPDPPE-IEIKDVKARTITLRWTMGFDGNSPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATQGQKKEMSCTAHGEKPI-IV-RWEKEDRIINPEMAPYLVSTKEVGEEVISTLQILPTV 856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ITVGENATMQCAASFDPALDLTFVWSFNGYVIDFNKEN-IHYQRNFMLDSNGELLIRNAQ 574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LNGRIQVLSNGSLLIKHVVEEDSGYYLCKVSNDVGADVSKSMYLTVKIPAMITSYPNTTL 798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -SSRILIWEDGSLEINNITRNDGGIYTCFAENNRGKANSTGT-LVITDPTRIILAPINAD 515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SQL-IVRVPPKFVVQPRDQDGIYGKA--VILNCSAEGYPVPTIVWKFSKGAGVPQFQPIA 738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AELKILALAPTFEMNPMKKKILAAKGGRVIIECKPKAAPKPKFSW--SKGT---EWL-VN 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KPIP-TIRWLKNGYAYH-K-G-----E----LRLYDV" -ENAGMYQCIAENTYCAIYAN 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         198;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: Modified-site LOCATION: 913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1018 AA; 113333 MW; 5493875 CN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /label= ASN-glycos
/note= "potential
glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "potential site of ASN-linked
glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 629; DB 1; Le
Pred. No. 4.68e-33;
196; Mismatches 348;
      PRT;
      1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    site
      æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1018;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      of ASN-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels 49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               915
   XXXXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 6, Application US/08714901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 6, Application US/08714901 Patent No. 5739289
                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET UMBER: INFORMATION FOR SEQ : NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE:
ORIGINAL SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/0.
FILING DATE: 26 MAR 1993
ATTORNEY/AGENT INFORMATION:
NAME: Fugit, Donna R.
REGISTRATION NUMBER: 32,135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Reid, Robert A.
APPLICANT: Hemperly, John J.
TITLE OF INVENTION: Human Cell Adhe
TITLE OF INVENTION: Acid Sequences
                                                                          FEATURE:
                                                                                                          FEATURE:
NAME/KEY:
                                                                                                                                                                                                                LOCATION: FEATURE:
                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                      FEATURE:
LOCATION: 604..657
OTHER INFORMATION: OTHER INFORMATION: OTHER INFORMATION:
                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                            FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                            NAME/KEY:
                                                                                                                                                                                                                                                                                                                       NAME/KEY:
LOCATION:
                                                                                            LOCATION:
                                                                                                                                                                                   LOCATION:
                                                                                                                                                                                                                                              NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 08 FILING DATE: 21-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 17-SEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: One Becton D
CITY: Franklin Lakes
                                                              NAME/KEY:
                                                                                                                                       LOCATION:
                                                                                                                                                       NAME/KEY:
                                                                                                                                                                                                   NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                    ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Richard J. Rodrick, Becton Dickinson ADDRESSEE: and Company
                                                                                                                                                                                                                                                                                                                                                                                                                                               ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07417
                                                                                                                                                                                                                                                                                                                                                                                                                                 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     z
                                                                                                                                                                                                                                                                                                                                                                                                                                               1018 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                          Disulfide-bond 506..563
                                                                                                                                                                                                                                                                           Disulfide-bond
138..191
                                                                                                                                                                                                                                                                                                                         Disulfide-bond 45..94
                                                              Domain
                                                                                                                                     Disulfide-bond
416..464
                                                                                                                                                                                  Disulfide-bond 332..371
                                                                                                                                                                                                                              Disulfide-bond
243..290
                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            UMBER: US/08/714,901
17-SEP-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JMBER: US/08/040,741
26 MAR 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , John J.
Human Cell Adhesion Molecule and Nucleic
/label= FLR
/note= "conserved
III-like repeat"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US 08/408,093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Version
               core of fibronectin type
```

20 밁 δÃ

80 밁 δ DЬ

Š 밁 Q

В Š 밁

DЪ Ş 밁 Qy 밁 δÃ B õ Ş

В Ş Ş

밁

В

В

```
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IOCATION: 905...../label-
LOCATION: 905..../label-
OTHER INFORMATION: /note='
OTHER INFORMATION: III-lik
FEATURE:
NAME/KEY: Modified-site
NAME/KEY: 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: Modified-site
LOCATION: 453
OTHER INFORMATION: /label
OTHER INFORMATION: /note-
OTHER INFORMATION: 9lycos
FEATURE: Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
NAME/KEY: Domain
LOCATION: 707..760
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: Modified-
LOCATION: 318
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 238
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                           FEATURE:
NAME/KEY:
                                                                                 NAME/KEY: Modified-
LOCATION: 571
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                  FEATURE
                                                                                                                                                           NAME/KEY: Modified-
LOCATION: 501
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                       LOCATION: 474
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                         LOCATION: 437
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY:
LOCATION:
OTHER INFO
OTHER INFO
          LOCATION: 913
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: Modified-site LOCATION: 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /KEY: Domain TION: 905..952 R INFORMATION: R INFORMATION: R INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /KEY: Domain TION: 809..857 R INFORMATION: R INFORMATION: R INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Domain
707..760
 AΑ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Modified-site
                                                                                                                           Modified-site 571
                                                                                                                                                                                                   Modified-site 501
                                                             Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /label= ASN-glycos
/note= "potential site
glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /label= FLR
/note= "conserved
III-like repeat"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /label= ASN-glycos
/note= "potential site
glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /label- ASN-glycos
/note- "potential site of
glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /label= FLR
/note= "conserved
III-like repeat"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /label= FLR
/note= "conserved
III-like repeat"
          /label= ASN-glycos
/note= "potential
glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                         /label= ASN-glycos
/note= "potential
glycosylation"
                                                                                                                                                             /label ASN-glycos
/note "potential site
glycosylation"
                                                                                                                                                                                                                                      /label= ASN-glycos
/note= "potential
glycosylation"
                                                                                  /label= ASN-glycos
/note= "potential site
glycosylation"
                                                                                                                                                                                                                                                                                                                glycosylation"
                                                                                                                                                                                                                                                                                                                            /label= ASN-glycos
/note= "potential
  MW.
  CN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 core
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    core
                           site
                                                                                                                                                                                                                                                                                                                                                                                                           site
                                                                                                                                                                                                                                                      site
                                                                                                                                                                                                                                                                                                                                 site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of fibronectin
                                                                                                     of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0f
                                                                                                                                                                            of.
                                                                                                                                                                                                                                                      of
                                                                                                                                                                                                                                                                                                                                 of.
                                                                                                                                                                                                                                                                                                                                                                                                           of ASN-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of ASN-linked
                           of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ASN-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    fibronectin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ASN-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 fibronectin
                                                                                                   ASN-linked
                                                                                                                                                                              ASN-linked
                                                                                                                                                                                                                                                       ASN-linked
                           ASN-linked
                                                                                                                                                                                                                                                                                                                                ASN-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           type
```

```
ν
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
RESULT
ID UI
AC XX
AC XX
AC XX
AC XX
CCC
CCC
                                                                                                                                                                                                                ρy
                                                                                                                                                                                                                                                               δÕ
                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                 γQ
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                   δõ
                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                Qy
                                                                                                                                                                                         밁
                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 19
                                                                                                                                                                                                                                                                     1153
                                                                                       XXXXXX
                                                                                                               US-08-452-052-2
                                                                                                                                                                  1271 NSSEI-ITVEP
                                                                                                                                                                                                                    1211
                                                                                                                                                                                                                                                                                                                       1093
                                                                                                                                                                                                                                                                                                                                                                        1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         504
                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               299
                                                                                                                                                                                                                                                                                                                                                                                                                            974
                                                                                                                                                                                                                                                                                                                                                                                                                                                    695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             357
                                                                                                                                                                                                                                                                                                                                                                                                  754
Sequence 2, Patent No. !
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DVQKEVDEGEYTCNVLVQPQLSTSQSVHVTVKV-PPFIQPFEFPRFSIGQRVFIPCVVVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PADIVVQFKDVYALMGQNVTLECFALGNPVPDIRWRKVLEPMP-STAEIS-TSGAVLKIF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KPIP-TIRWLKNGYAYH-K-G-----E----LRLYDVTFENAGMYQCIAENTYGAIYAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PASIR-PMKNITAIAGRDTYIHCRVIGYPYYSIKWYKNSNLLPFNHRQVAFENNGTLKLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AELKILALAPTFEMNPMKKKILAAKGGRVIIECKPKAAPKPKFSW--SKGT---EWL-VN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GDLPITITWQKDGRPIPGSLGVTIDNIDFTSSLRISNLSLMHNGNYTCIARNEAAAVEHQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NIQLE-DEGIYECEA-ENIRGKDKHQARIYVQAFPEWVEHINDTEVDIGSDLYWPCVATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SKYTIQTKTILSDDWKDAKTDPPIIEGNMEAARAVDLIPWMEYEFRVVATNTLGRGEPSI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REDSGFFSCHAINSYGEDRGIIQLTVQEPPDPPE-IEIKDVKARTITLRWTMGFDGNSPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATQGQKKEMSCTAHGEKPI-IV-RWEKEDRIINPEMARYLVSTKEVGEEVISTLQILPTV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LNGRIQVLSNGSLLIKHVVEEDSGYYLCKVSNDVGADVSKSMYLTVKIPAMITSYPNTTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -SSRILIWEDGSLEINNITRNDGGIYTCFAENNRGKANSTGT-LVITDPTRIILAPINAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SQL-IVRVPPKEVVQPRDQDGIYGKA--VILNCSAEGYPVPTIVWKESKGAGVVPQEQPIA
                                                                                                                               4
                                                                                                                                                                                           VVSQVKISGAP
                                                                                                                                                                                                                   PPLKLNGIIRKYTVFCSHPYPTVISEFEASPDSFSYRIPNLSRNRQYSVMVVAVTSAGRG
                                                                                                                                                                                                                                          VALSNESTVTGYKVLY-RPDGQHDGKL-YSTHKHSIEVP-IPRDGEYVVEVRAHSDGGDG
                                                                                                                                                                                                                                                                   ENLLPDTQYFIEVGACNSAGCGPPSDMIEAFTKKAPPSQPPRIISSVRSGSRYIITWDHV
                                                                                                                                                                                                                                                                                                                     ENVQAIATSPESISISWSTLSKEALNGILQGFRVIYWANLMDGELGEIKNITTTQPSLEL
                                                                                                                                                                                                                                                                                                                                    TEVGYKVLSSSEISVHWE----HVLEKIVESYQIRYWAAHDKEEAANRVQVTSQEYSARL
                                                                                                                                                                                                                                                                                                                                                                       FQFNIISVDTSGDSEVYTLDNLNKFTQYGLVVQACNRAGTGPSSQEIITTTLEDVPSYPP
                                                                                                                                                                                                                                                                                                                                                                                               WK-KVTVTNPDTGRYVHKDETMSPSTAFQVKVKAFNNKGDGPYSLLAVINSAQDAPSEAP
                                                                                                                                                                                                                                                                                                                                                                                                                          ELT-ITADEAAPDGPPQEVHLEPISSQSIRVTWKAPKKHLQNGIIRGYQIGYREYSTGGN
                                                                                                                                                                                                                                                                                                                                                                                                                                                 PSNRIKTDGAAPNVAPSDVGGGGGRNRELTITWAPLSREYHYGNNFGYIVAFKPFD-GEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LKHAGRYTCTAQTIVDNSSASADLVVRGPPGPPGGLRIEDIRATSVALTWSRGSDNHSPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ITVGENATMQCAASFDPALDLTFVWSFNGYVIDFNKEN-IHYQRNFMLDSNGELLIRNAQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ch 5.6%;
1 Similarity 25.0%;
198; Conservative
                                     2,
 Application 5766922
                                    Application US/08452052
                                                                                                                                                                                           996
                                                                                                                  STANDARD;
              US/08452052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 629; DB 1; Length 1018; Pred. No. 4.68e-33; 196; Mismatches 348; Indels 49;
                                                                                                                  PRT;
                                                                                                                  1018
                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                     812
                                                                                                                                                                                                                                                                                                                                                                                                                              1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                403
                                                                                                                                                                                                                                               985
                                                                                                                                                                                                                                                                         1210
                                                                                                                                                                                                                                                                                                 928
                                                                                                                                                                                                                                                                                                                         1152
                                                                                                                                                                                                                                                                                                                                                                            1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    298
                                                                                                                                                                                                                                                                                                                                                   868
                                                                                                                                                                                                                                                                                                                                                                                                                                                      753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    856
                                                                                                                                                                                                                        1270
```

```
Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240 PADIVVQFKDIYTMMGQNVTLECFALGNPVPDIRWRKVLEPMP-TTAEIS-TSGAVLKIF 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Peles, E
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                     682
                                                                                                                                                                                                                                                                                                                                                                               403
                                                                                                                                                                                                                                                                                                                                                                                                                         622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          298 NIOLE-DEGLYECEA-ENIRGKDKHOARIYVOAFPEWVEHINDTEVDIGSDLYWPCVATG 355
  915
                                          635
                                                                                                                                                                   799
                                                                                                                                                                                                                                                   739
                                                                                                                                                                                                                                                                                             457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/452,052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 1018 amino aci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DVQKEVDEGEYTCNVLVQPQLSTSQSVHVTVKV-PPFIQPFEFPRFSIGQRVFIPCVVVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                          KPIP-TIRWLKNGYAYH-K-G-----E----LRLYDVTFENAGMYQCIAENAYGTIYAN 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PASIR-PMKNITAIAGRDTYIHCRVIGYPYYSIKWYKNSNLLPFNHRQVAFENNGTLKLS 562
                                                                                                                                                                                                       ITVGENATMOCAASFDPSLDLTFVWSFNGYVIDFNKEITHIHYQRNFMLDANGELLIRNA
                                                                                                                                                                                                                                                                                      -SSRILIWEDGSLEINNITRNDGGIYTCFAENNRGKANSTGT-LVITNPTRIILAPINAD
                                                                                                                                                                                                                                                                                                                                   SQL-IVRVPPKFVVQPRDQDGIYGKA--VILNCSAEGYPVPTIVWKFSKGAGVPQFQPIA
                                                                                                                                                                                                                                                                                                                                                                           AELKILALAPTFEMNPMKKKILAAKGGRVIIECKPKAAPKPKFSW--SKGT---EWL-VN 456
                                                                                                                                                                                                                                                                                                                                                                                                                         GDLPITITWQKDGRPIPGSLGVTIDNIDFTSSLRISNLSLMHNGNYTCIARNEAAAVEHQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: New York
STATE: New Yor
ITGYDIECKNK-SDSWDSAQRTKDV-SPQLNSATIIDIHPSSTYSIRMYAKNRIGKSEPS
                                     ISKYTIQTKTILSDDWKDAKTDPPIIEGNMESAKAVDLIPWMEYEFRVVATNTLGTGEPS 694
                                                                                                                       QLKHAGRYTCTAQTIVDNSSASADLVVRGPPGPPGGLRIEDIRATSVALTWSRGSDNHSP
                                                                                                                                                                 ATQGQKKEMSCTAHGEKPI-IV-RWEKEDRIINPEMARYLVS-TKEVGEEVISTLQILPT
                                                                                                                                                                                                                                                 LNGRIQVLSNGSLLIKHVVEEDSGYYLCKVSNDVGADVSKSMYLTVKIPAMITSYPNTTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: U.S.A. ZIP: 10036-2711
                                                                                 VREDSGFFSCHAINSYGEDRGIIQLTVQEPPDPPE-IEIKDVKARTITLRWTMGFDGNSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER: 30,742 REFERENCE/DOCKET NUMBER: 761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/452,052 FILING DATE: 26-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (212) 869-8864/9741 TELEX: 66141 PENNIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LE TYPE: protein
1018 AA; 113102 MW; 5593274 CN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.4%;
ilarity 24.9%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Coruzzi, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1155 Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pennie &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Elior
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RECOGNITION MOLECULE CONTACTIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FUNCTIONAL LIGANDS FOR THE AXONAL CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  e of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 606; DB :; Length 1018; Pred. No. 1.86e-31; 205; Mismatches 344; Indels 54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7683-075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                634
                                                                                                                                                                          855
                                                                                                                                                                                                                  574
                                                                                                                                                                                                                                                          798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               623
        972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      37;
```

 Db
 Db

 Qy
 Qy

 Db
 Db

 Db
 Db

 Db
 Db

65 A 65

5 B

```
Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-348-006B-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 5, Application US/08348006B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          XXXXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  973 NELT-ITADEAAPDGPPQEVHLEPISSQSIRVTWKAPKKHLQNGIIRGYQIGYREYSTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         695 IPSNRIKTDGAAPNVAPSDVGGGGGTNRELTITWAPLSREYHYGNNFGYIVAFKPFD--G
                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 5,
                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
         INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                      CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: J. MARK H
                                                                                                                                                                                                                                                                                                                                                      APPLICANT: SCHMIDT, AZRIEL
APPLICANT: RUTLEDGE, SU JANE
TITLE OF INVENTION: CDNA ENCODING A NOVEL HUMAN PROTEIN
TITLE OF INVENTION: TYROSINE PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RGNSSEI-IT-VEPLAKAPARIL 1289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RLENLLPDTQYFIEVGACNSAGCGPSSDVIETFTRKAPPSQPPRIISSVRSGSRYIITWD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PPENVQAIATSPESISISWSTLSKEALNGILQGFRVIYWANLMDGELGEIKNITTTQPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APTEVGVKVLSSSEISVHW-----KHVLEKIVESYQIRYAGHDKEAAAHRVQ-VTSQEYSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NFQFNIISVDTSGDSEVYTL-DNLNKFTQYGLVVQACNRAGTGPSSQEIITTTLEDVPSY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E-EWKKYTV-TNPDTGRYVHKETMTPSTAFQVKVKAFNNKGDGPYSLIAVINSAQDAPSE
                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/122,032
                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DGVVSQVKISGVSTLSSGLLSLL
                                            TELEPHONE: 908-594-3905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HVVALSNESTVTGYKILY-RPDGOHDGKL-FSTHKHSIEVP-IPRDGEYVVEVRAHSDGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ELDGLEKYTNYSIQVLAFTRAGDGVRSEQIFTRTKEDVPGPPAGVKAAAASASMVFVSW-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -LPPLKLNGIIRKYTVFCSHPYPTVISEFEASPDSFSYRIPNLSRNRQYSVWVVAVTSAG
                                                                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                           STREET:
                                                                 NAME: HAND, J., MARK REGISTRATION NUMBER: 36, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                               COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                            ZIP:
                                                                                                                                                                                                                                                                     COUNTRY:
                                   TELEFAX:
                                                                                                                FILING DATE: 14-SEP-1993
                                                                                                                                                               FILING DATE
                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                           07065-0900
                                                                                                                                                                                                                                                                                 RAHWAY
: NEW JERSEY
                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/08348006B
                                                                                                                                                                                                                                                                                                          126
                                                                                                                                                                                                                                                                                                                                                                                                    RODAN, GIDEON A.
  1911 amino acids
                                   908-594-4720
                                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                       E. LINCOLN
                                                                                                                                                                                                                                                                                                                    MARK HAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                     514
                                                                                                                                                                          US/08/348,006B
                                                                               36,545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1005
                        5
                                                                                                                                                                                                                                                                                                         AVE.,
                                                                      8992IA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                          P.O.
                                                                                                                                                                                                   Version
                                                                                                                                                                                                                                                                                                         BOX 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1911 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       982
```

```
888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             рь
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
Š
                                   B
                                                             δÃ
                                                                                                Вþ
                                                                                                                              Qγ
                                                                                                                                                                 В
                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                       1181
                                                                                                                                                                                                                                                                                                                                        1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                    1236
   1401
                                                                                                                                   1290
                                                                  1346
                                                                                                                                                                                                                                                                                                                                                                                                         1061 GLVVQACNRAGTGPSSQEIITTTLEDVPSYPPENVQAIATSPESISISWSTLSKEALNGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         596
                                                                                                                                                                                                                                                                                                       598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     33 PRFIKEPK-DQIGVSGRVASFV-CQA-TGDPKPRVTWNKKGKKVNSQRFETIEFDESAGA 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Match 5.1%;
Local Similarity 25.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -LRISNLSLMHNGN-YTCIARNEAAAVEHQSQLIV-R---VPPKFV-VQPRDQ-DGIY-G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PPFIQPFEFPRFSIGORV--FIPCVVVSGDLPITITWQKDGRPIPGSLGVTIDNIDFTSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino a STRANDEDNESS: TOPOLOGY: lir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RTATMLCAASGNPDPEITW-F-KDF-LP-VDPSASNGRIKQLRSGALQIESSEETDQGKY 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VLRIQPLRTPRDENVYECVAQNSVGEITVHAKLTVLREDQLPSGFPNIDMGPQLKVVERT 149
                                                                                                                                                                                                                                                                    FTRTKEDVPG-PPAGVKAAAASASMVFVSW-LPPLKL-NGIIRKYTV-FCSHPYPTVIS-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VKSLPKAPGTPMVTENTATSITITWDSG-NPD-PVSYYVIEYKSKSQD-G" () IKEDITT 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LCKVSNDVGADVSK-S-MYLTVK-IPAMITSYPNTTLATQGQKKEMSCTAHGEKPIIVRW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ECVATNSAGVRYSSPANLYVRVRRVAPRFSILPMSHEIMPGGNVNITCVAVGSPMPYVKW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KAVILNCSAEGYPVPTIVWKFSKGAGVPQFQPIALNGRIQVLSNGSLLIKHVVEEDSGYY 764
                                                                                                ITNLQPE-TAYSITVAAYTMKGDGARSKPKVVVTKGAVLGRPTLSVQQTPEGSLLARWEP
                                                                                                                                                                                                    EFEA-SPDSFSYRIPNLSRNRQYSVWVVAVTSAGRG-NSSEII--TVEPLAKAPAR-I-L 128
                                                                                                                                                                                                                                    EVNGIPPTTTQILLEALEKWTQYRITTVAHTEVGPGPESSPVVVRTDEDVPSAPPRKVEA
                                                                                                                                                                                                                                                                                                   RORTLOSKPSAPPODVKCVSVRSTAILVSWRPPPPETHNGALVGYSVRYRPLGSEDPEPK
                                                                                                                                                                                                                                                                                                                                       LQGFRVIYWANLMDGELGEIKNITTTQPSLELDGLEKYTNYSIQVLAFTRAGDGVRSEQI
                                                                                                                                                                                                                                                                                                                                                                        IK-YELLFREGDHGREVG--RTFDPT-TSYVVEDLKPNTEYAFRLAARSPQGLGAFTPVV
                                                                                                                                                                                                                                                                                                                                                                                                                                         TVRVLAFTSVGDGPLSDPIQVKTQQGVPG-QPMNLRAEARSETSITLSWSP-PRQ--ESI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MIVQWEEPV-E-PNGLIRGYRV-Y--YTMEPEHPVGNWQ...ANVDDSLLTTVGSLLEDETY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QLNSATIIDIHPSSTYSIRMYAKNRIGKSEPSNELTITADEAAPDGPPQEVHLEPISSQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           --TRYSIGGLSPNSEYEIWVSAVNSIGQGPPSESVVTRTGEQAPARPPRNVQARMLSATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VQEPPDPPEIE-IKDVKARTITLRWTMGFDGNSPITGYDIECKNKSDSWDSAQRTKDVSP 940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EKEDRIINPEMARYLVSTKEVGEEVISTLQILPTVREDSGFFSCHAINSYGEDRGIIQLT
                                 PAGTAEDQVLGYRLQFGREDSTPLATLEFPPSEDRYTASGVHKGATYVFRLAARSPGGLG
                                                                                                                                                                   EALNATAIRVLW-RSPA-PGRQHGQIRGYQVHYVR-MEGAEARGPPRIKDVMLADAQEMV 774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -MQG--AE-DLTP--EDDMPVGRNV---LE-LTDVKDSANYHPCVAMSSLGVIEAVAQIT
 PGDNGGSSIRGYILOYSEDNSEQWGSFPISPSERSYRLENLKCGTWYKFTLTAQNGVGPG
                                                                  IRTVKAEDSGYYSCIANNNWGSDEIILNLQVQVP--P--DQPRLTVSKTTSSSITLSW-L
                                                                                                                                   -TFSGT-VTTPWMKDIVLPCKAVGDPSP-AVKWMKDSNGTPSLVTIDGRRSIFSNG-SFI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       230;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1911 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein
213063 MW; 19256861 CN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 569; DB 1; Le
Pred. No. 6.80e-29;
217; Mismatches 379;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1911;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels 74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                               1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           653
                                                                                                                                                                                                                                                                                                                                          1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     315
                                                                                                                                                                                                                                                                                                           657
                                                                                                                                                                                                                                                                                                                                                                             597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      821
       1460
                                      893
```

RESULT ID US

US-08-800-825A-5

STANDARD;

PRT;

1911 AA

```
γ
                                                                                                                                                          밁
                                                                                                                                                                                   Ş
                                                                                                                                                                                                             В
                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                  В
밁
                       Q
                                                  밁
                                                                           δÃ
                                                                                                        밁
                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                         Best
                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          XXXXX
                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 5, Application US/08800825A
                                                                                                                                                                                                                                        596 PPFIQPFEFPRFSIGORV--FIPCVVVSGDLPITITWQKDGRPIPGSLGVTIDNIDFTSS
316 VKSLPKAPGTPMVTENTATSITITWDSG-NPD-PVSYYVIEYKSKSQD-GPYQIKEDITT
                                                                                                                                                                                                               90
                                                                                                                                                                                                                                                                 33 PRFIKEPK-DQIGVSGRVASFV-CQA-TGDPKPRVTWNKKGKKVNSQRFETIEFDESAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 732-594-4720 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                           Match 5.1%; Score 559; DB 2; Length 1911; Local Similarity 25.5%; Pred. No. 6.80e-29; les 230; Conservative 217; Mismatches 379; Indels 74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: SCHMIDT, AZRIEL
APPLICANT: RUTLEDGE, SU JANE
TITLE OF INVENTION: CDNA ENCODING A NOVEL HUMAN
TITLE OF INVENTION: TYROSINE PHOSPHATASE
NUMBER OF SEQUENCES: 7
                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear
MOLECULE TYPE: protein
JENCE 1911 AA; 213063 MW; 19256861 CN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: HAND, J. MARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 1911 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: 732-594-3905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                     VLRIQPLRTPRDENVYECVAQNSVGEITVHAKLTVLREDQLPSGFPNIDMGPQLKVVERT
                         EKEDRIINPEMARYLVSTKEVGEEVISTLQILPTVREDSGFFSCHAINSYGEDRGIIQLT
                                                  -MQG--AE-DLTP--EDDMPVGRNV---LE-LTDVKDSANYHPCVAMSSLGVIEAVAQIT
                                                                               LCKVSNDVGADVSK-S-MYLTVK-IPAMITSYPNTTLATQGQKKEMSCTAHGEKPIIVRW
                                                                                                        ECVATNSAGVRYSSPANLYVRVRRVAPRFSILPMSHEIMPGGNVNITCVAVGSPMPYVKW
                                                                                                                               KAVILNCSAEGYPVPTIVWKFSKGAGVPQFQPIALNGRIQVLSNGSLLIKHVVEEDSGYY
                                                                                                                                                       RTATMLCAASGNPDPEITW-F-KDF-LP-VDPSASNGRIKQLRSGALQIESSEETDQGKY
                                                                                                                                                                                   -LRISNLSLMHNGN-YTCIARNEAAAVEHQSQLIV-R---VPPKFV-VQPRDQ-DGIY-G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: /32-594-4720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: USA
ZIP: 07065-0900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 36,545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET:
                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 , Application 5866397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RAHWAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NEW JERSEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E: J. MARK HAND - MEH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RODAN, GIDEON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                       single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US/08800825A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/800,825A
                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MERCK &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .8992DA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CO., INC
BOX 2000
                                                                                                                                                                                                                                                                                                                    Length 1911;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #
|-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROTEIN
                                                                                                                                                                                                                                                                                              Gaps
                                                      315
                                                                                                         265
                                                                                                                                                             205
                                                                                                                                                                                                                                            653
                                                                                821
```

```
δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÔ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                     PCT-US94-10166-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1061
                                                                                                                                                                                                                                                                                                                                                             Sequence 5, Application PC/TUS9410166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        882
                                                                                                                                                                                                                                                                                                                    Sequence 5, Application PC/TUS9410166 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10
                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                           APPLICANT: RODAN, GIDEON A
APPLICANT: SCHMIDT, AZRIEL
APPLICANT: RUTLEDGE, SU JANE
TITLE OF INVENTION: CDNA ENCODING A NOVEL HUMAN PROTEIN
TITLE OF INVENTION: TYROSINE PHOSPHATASE
                                        SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GLVVQACNRAGTGPSSQEIITTTLEDVPSYPPENVQAIATSPESISISWSTLSKEALNGI 1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QLNSATIIDIHPSSTYSIRMYAKNRIGKSEPSNELTITADEAAPDGPPQEVHLEPISSQS 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VQEPPDPPEIE-IKDVKARTITLRWTMGFDGNSPITGYDIECKNKSDSWDSAQRTKDVSP 940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAGTAEDQVLGYRLQFGREDSTPLATLEFPPSEDRYTAS JVHKGATYVFRLAARSPGGLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EFEA-SPLSFSYRIPNLSRNRQYSVWVVAVTSAGRG-NSSEII-TVEPLAKAPAR-I-L 1289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IRVTWKAPKKHLQNGIIRGYQIGYREYSTGGNFQFNIISVDTSGDSEVYTLDNLNKFTQY 1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MIVQWEEPV-E-PNGLIRGYRV-Y--YTMEPEHPVGNWQKHNVDDSLLTTVGSLLEDETY 485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          --TRYSIGGLSPNSEYEIWVSAVNSIGQGPPSESVVTRTGEQAPARPPRNVQARMLSATT 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PGDNGGSSIRGYILQYSEDNSEQWGSFPISPSERSYRLENLKCGTWYKFTLTAQNGVGPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IRTVKAEDSGYYSCIANNNWGSDEIILNLQVQVP--P--DQPRLTVSKTTSSSITLSW-L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ITNLQPE-TAYSITVAAYTMKGDGARSKPKVVVTKGAVLGRPTLSVQQTPEGSLLARWEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EALNATAIRVLW-RSPA-PGRQHGQIRGYQVHYVR-MEGAEARGPPRIKDVMLADAQEMV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EVNGIPPTTTQILLEALEKWTQYRITTVAHTEVGPGPESSPVVVRTDEDVPSAPPRKVEA 717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RORTLOSKPSAPPODVKCVSVRSTAILVSWRPPPPETHNGALVGYSVRYRPLGSEDPEPK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LQGFRVIYWANLMDGELGEIKNITTTQPSLELDGLEKYTNYSIQVLAFTRAGDGVRSEQI 1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IK-YELLFREGDHGREVG--RTFDPT-TSYVVEDLKPNTEYAFRLAARSPQGLGAFTPVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -TFSGT-VTTPWMKDIVLPCKAVGDPSP-AVKWMKDSNGTPSLVTIDGRRSIFSNG-SFI
                                                                                                                                             STATE: N
COUNTRY:
                                                                                                                                                                        STREET: P.O. CITY: RAHWAY
               APPLICATION NUMBER: PCT/UFILING DATE: 09-SEPT-1994
   CLASSIFICATION
                                                                                                                                                                                                     ADDRESSEE: JOHN W.
                                                                                                                                 07065
                                                                                                                                                            Z
                                                                                                                                                                                         P.O. BOX 2000,
                                                                                                                                              USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                     WALLEN III
                              PCT/US94/10166
                                                                                                                                                                                         126 E. LINCOLN AVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                           Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1911
                                                           25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           893
```

```
999999999999999999
                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                               QΥ
                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                               Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
밁
                         20
                                                              В
                                                                                         δÃ
                                                                                                                             밁
                                                                                                                                                        8
                                                                                                                                                                                          Вb
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                   дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                              1181
                                                                                                                                                            1121
                                                                                                                                                                                                                          1061
                                                                                                                                                                                                                                                                                        1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                      431
                                                                                                                                                                                                                                                                                                                                                      941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             596
                                                                                                                                                                                                                                                                                                                                                                                    373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION
TELEPHONE: 908-594-3905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 14-SEP-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VLRIQPLRTPRDENVYECVAQNSVGEITVHAKLTVLREDQLPSGFPNIDMGPQLKVVERT 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PPFIQPFEFPRFSIGQRV--FIPCVVVSGDLPITITWQKDGRPIPGSLGVTIDNIDFTSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRFIKEPK-DQIGVSGRVASFV-CQA-TGDPKPRVTWNKKGKKVNSQRFETIEFDESAGA
                                                                                                                                                                                                                                                                                                                     MIVQWEEPV-E-PNGLIRGYRV-Y--YTMEPEHPVGNWQKHNVDDSLLTTVGSLLEDETY
                                                                                                                                                                                                                                                                                                                                                                                                                                        VKSLPKAPGTPMVTENTATSITITMDSG-NPD-PVSYYVIEYKSKSQD-GPYQIKEDITT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LCKVSNDVGADVSK-S-MYLTVK-IPAMITSYPNTTLATQGQKKEMSCTAHGEKPIIVRW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RTATMLCAASGNPDPEITW-F-KDF-LP-VDPSASNGRIKQLRSGALQIESSEETDQGKY
EALNATAIRVLW-RSPA-PGRQHGQIRGYQVHYVR-MEGAEARGPPRIKDVMLADAQEMV
                                                                                              FTRTKEDVPG-PPAGVKAAAASASMVFVSW-LPPLKL-NGIIRKYTV-FCSHPYPTVIS-
                                                                                                                                                          LQGFRVIYWANLMDGELGEIKNITTTQPSLELDGLEKYTNYSIQVLAFTRAGDGVRSEQI
                                                                                                                                                                                                                        GLVVQACNRAGTGPSSQEIITTTLEDVPSYPPENVQAIATSPESISISWSTLSKEALNGI
                                                                                                                                                                                                                                                     TVRVLAFTSVGDGPLSDPIQVKTQQGVPG-QPMNLRAEARSETSITLSWSP-PRQ--ESI
                                                                                                                                                                                                                                                                                      IRVTWKAPKKHLQNGIIRGYQIGYREYSTGGNFQFNIISVDTSGDSEVYTLDNLNKFTQY
                                                                                                                                                                                                                                                                                                                                                      QLNSATIIDIHPSSTYS1RMYAKNRIGKSEPSNELTITADEAAPDGPPQEVHLEPISSQS
                                                                                                                                                                                                                                                                                                                                                                                                                   VQEPPDPPEIE-IKDVKARTITLRWTMGFDGNSPITGYDIECKNKSDSWDSAQRTKDVSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KAVILNCSAEGYPVPTIVWKFSKGAGVPQFQPIALNGRIQVLSNGSLLIKHVVEEDSGYY
                                                                                                                                                                                                                                                                                                                                                                       --TRYSIGGLSPNSEYEIWVSAVNSIGQGPPSESVVTRTGEQAPARPPRNVQARMLSATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EKEDRIINPEMARYLVSTKEVGFEVISTLQILPTVREDSGFFSCHAINSYGEDRGIIQLT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ECVATNSAGVRYSSPANLYVRVRRVAPRFSILPMSHEIMPGGNVNITCVAVGSPMPYVKW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -LRISNLSLMHNGN-YTCIARNEAAAVEHQSQLIV-R---VPPKFV-VQPRDQ-DGIY-G
                               EFEA-SPDSFSYRIPNLSRNRQYSVWVVAVTSAGRG-NSSEII--TVEPLAKAPAR-I-L
                                                            EVNGIPPTTTQILLEALEKWTQYRITTVAHTEVGPGPESSPVVVRTDEDVPSAPPRKVEA
                                                                                                                            RQRTLQSKPSAPPQDVKCVSVRSTAILVSWRPPPPETHNGALVGYSVRYRPLGSEDPEPK
                                                                                                                                                                                        IK-YELLFREGDHGREVG--RTFDPT-TSYVVEDLKPNTEYAFRLAARSPQGLGAFTPVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -MQG--AE-DLTP--EDDMPVGRNV---LE-LTDVKDSANYHPCVAMSSLGVIEAVAQIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: 908-55.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: WALLEN, JOHN W III REGISTRATION NUMBER: 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.1%;
Similarity 25.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1911 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative 217;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1911 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein
213063 MW; 19256861 CN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US 08/122,032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 569; DB 3; Lo
Pred. No. 6.80e-29;
217; Mismatches 379;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   35403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1911;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels 74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                          1120
                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                        485
                                                                                                                                                                                                                                                                                                                                                                                      430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           89
                                                                                                                                                                                                                                                                                                                                                      1000
                                                                                                                                                                                                                                                                                                                                                                                                                    940
                                                                                                                                                                                                                                                                                                                                                                                                                                                   372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                764
```

:: ----

```
Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                         Q
 Вb
                                                     ₽
                                                                                             Query Match
Best Local Similarity
                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               XXXXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-716-679-3
                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3, Application US/08716679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 3, Application US/08716679
110 QNSVGEITVHAKLTVLREDQLPPGFPNIDMGPQLKVVERTRTATMLCAASGNPDPEITW- 168
                            614 FIPCVVVSGDLPITITWQKDGRPIPGSLGVTIDNIDFTSS-LRISNLSLMHNGN-YTCIA
                                            52 FV-CQA-TGDPKPRVTWNKKGKKVNSQRFETIDFDESSGAVLRIQPLRTPRDENVYECVA 109
                                                                                                                                                                                                       TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO: 3: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                   MOLECULE
                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: 76
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-790-9090
                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -TFSGT-VTTPWMKDIVLPCKAVGDPSP-AVKWMKDSNGTPSLVTIDGRRSIFSNG-SFI 1345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PGDNGGSSIRGYILQYSEDNSEQWGSFPISPSERSYRLENLKCGTWYKFTLTAQNGVGPG 1460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAGTAEDQVLGYRLQFGREDSTPLATLEFPPSEDRYTASGVHKGATYVFRLAARSPGGLG 893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IRTVKAEDSGYYSCIANNNWGSDEIILNLQVQVP--P--DQPRLTVSKTTSSSITLSW-L 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ITNLOPE-TAYSITVAAYTMKGDGARSKPKVVVTKGAVLGRPTLSVQQTPEGSLLARWEP 833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 1155 A
CITY: New York
STATE: New Yor
                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                   TOPOLOGY
                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: U.S.A. ZIP: 10036-2711
                                                                                                                                                                                                                                                 TELEFAX:
                                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
                                                                                                                                                                                            LENGTH:
                                                                                                                                       LE TYPE: protein
1501 AA; 168336 MW; 11919615 CN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5846800
                                                                                                                                                                             amino acid
                                                                                                                                                                                                                                                                                                                       Misrock, S.
                                                                                4.3%; Score 486; DB 2; Larity 26.8%; Pred. No. 3.52e-23; Conservative 147; Mismatches 249;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1155 Avenue of the Americas
                                                                                                                                                                                               1501 amino acids
                                                                                                                                                                                                                                                  212-869-8864/9741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Schlessinger, Joseph
                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pennie &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                       Leslie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PHOSPHOTYROSINE PHOSPHATASE-SIGMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NOVEL RECEPTOR-TYPE PROTEIN
                                                                                                                                                                                                                                                                                                                                                               US/08/130,570
                                                                                                                                                                                                                                                                                                                                                                                                                      US/08/716,679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Edmonds
                                                                                                                                                                                                                                                                                                       18,872
                                                                                                                                                                                                                                                                                             7683-043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ą
                                                                                                             Length 1501;
                                                                                 Indels
                                                                                   50;
                                                                                 Gaps
                              671
                                                                                    40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1021
                                                                                                                                                                                                                                                                                                                                                 Sequence 3, Application US/08447464
                                                                                                                                                                                                                                                                                                                                                                                                         XXXXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-447-464-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1141 KNITTTQPSLELDGLEKYTNYSIQVLAFTRAGDGVRSEQIFTRTKEDVPGPPAGVKAAAA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    448
                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                       Sequence 3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               783 TVK-IPAMITSYPNTTLATQGQKKEMSCIAHGEKPIIVRWEKEDRIINPEMARYLVSTKE
                                                                                                                                                                                                                       APPLICANT: Schlessing
APPLICANT: Yan, Hai
TITLE OF INVENTION: P
TITLE OF INVENTION: P
RUMBER OF SEQUENCES:
                                      MEDIUM TYPE: Floppy disk
COMPOTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                           COMPUTER READABLE FORM:
                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KTS-VLLSW 623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VKTQQGVPG-QPMNLRAEAKSETSIGLSWSA-PRQ--ESVIK-YELLEREGDRGREVG--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QIGYREYSTGGNFQFNIISVDTSGDSEVYTLDNLNKFTQYGLVVQACNRAGTGPSSQEII 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YAKNRIGKSEPSNELTITADEAAPDGPPQEVHLEPISSQSIRVTWKAPKKHLQNGIIRGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VGEEVISTLQILPTVREDSGFFSCHAINSYGEDRGIIQLTVQEPPDPPEIEI-KDVKART
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VGRNV---LE-LTDVKDSANY-TCVAMSSLGVIEAVAQITVKSLPKAPGTPVVTENTATS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RVRRVAPRESILPMSHEIMPGGNVNITCVAVGSPMPYVKW-MQG--AE-DLTP--EDDMP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FSKGAGVPQFQPIALNGRIQVLSNGSLLIKHVVEEDSGYYLCKVSNDVGADVSK-S-MYL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F-KDF-LP-VDPSASNGRIKQLRSGALQIESSEETDQGKYECVATNSAGVRYSSPANLYV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RNEAAAVEHQSQLIV-R---VPPKFV-VQPRDQ-DGIY-GKAVILNCSAEGYPVPTIVWK 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SASMVEVSW 1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RTFDPT-TAFVVEDLKPNTEYAFRLAARSPQGLGAFTAVVRQRTLQAISPKNFKVKMIM-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTLEDVPSYPPENVQAIATSPESISISWSTLSKEALNGILQGFRVIYWANLMDGELGEI 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RV-Y--YTMEPEHPVGNWQKHNVDDSLLTTVGSLLEDETYTVRVLAFTSVGDGPLSDPIQ 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SAVNSIGQGPPSESVVTRTGEQAPASAPRNVQARMLSATTMIVQWEEPV-E-PNGLIRGY 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ITLRWTMGFDGNSPITGYDIECKNKSDSWDSAQRTKDVSPQLNSATIIDIHPSSTYSIRM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ITVTWDSG-NPD-PVSYYVIEYKSKSQD-GPYQIKEDITT--TRYSIGGLSPNSEYEIWV
                                                                                                                                                      CITY: New York
STATE: New Yor
                 APPLICATION NUMBER: US/08/447,464 FILING DATE: 24-MAY-1995
                                                                                                                           COUNTRY: U.S.A. ZIP: 10036-2711
                                                                                                                                                                               STREET:
    CLASSIFICATION:
                                                                                                                                                                                               ADDRESSEE:
                                                                                                                                                                                                                                                                                                       No.
                                                                                                                                                                                                                                                                                                                      Application US/08447464
                                                                                                                                                   New York
                                                                                                                                                                                1155 Avenue of the Americas
                                                                                                                                                                                                                                                                              Schlessinger, Joseph
                                                                                                                                                                                               Pennie &
                                                                                                                                                                                                                                                                                                                                                                                                                                   ST. . IDARD;
                                                                                                                                                                                                                                       PHOSPHOTYROSINE
                                                                                                                                                                                                                                                     NOVEL RECEPTOR-TYPE PROTEIN
                                                                                                                                                                                               Edmonds
                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                   1501
                                                                                                                                                                                                                                     PHOSPHATASE-SIGMA
```

615

557

1020

389

960

334

279

841

08/130,570

```
RESULT
ID US
XX
AC XX
XX
                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                       멍
                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                          В
                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                           Š
                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                             JT 13
US-08-752-307B-13
                xxxxxx
                                                                                                                                                                                                                                                                                                          1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                          1141 KNITTTQPSLELDGLEKYTNYSIQVLAFTRAGDGVRSEQIFTRTKEDVPGPPAGVKAAAA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                614
                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                        390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    169
                                                                                                                                           616 KTS-VLLSW 623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               52 FV-CQA-TGDPKPRVTWNKKGKKVNSQRFETIDFDESSGAVLRIQPLRTPRDENVYECVA 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Match 4.3%;
Local Similarity 26.8%;
les 163; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 1501 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 76
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/1
FILING DATE: 01-OCT-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FIPCVVVSGDLPITITWQKDGRPIPGSLGVTIDNIDETS - LRISNLSLMHNGN-YTCIA 671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VGRNV---LE-LTDVKDSANY-TCVAMSSLGVIEAVAQITVKSLPKAPGTPVVTENTATS 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RVRRVAPRESILPMSHEIMPGGNVNITCVAVGSPMPYVKW-MQG--AE-DLTP--EDDMP 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RNEAAAVEHQSQLIV-R---VPPKFV-VQPRDQ-DGIY-GKAVILNCSAEGYPVPTIVWK 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QNSVGEITVHAKLTVLREDQLPPGFPNIDMGPQLKVVERIRTATMLCAASGNPDPEITW- 168
                                                                                                                                                                                                                                            TTTLEDVPSYPPENVQAIATSPESISISWSTLSKEALNGILQGFRVIYWANLMDGELGEI 1140
                                                                                                                                                                                                                                                            VKTQQGVPG-QPWNLRAEAKSETSIGLSWSA-PRQ--ESVIK-YELLFREGDRGREVG-- 557
                                                                                                                                                                                                                                                                                                        QIGYREYSTGGNI QFNIISVDTSGDSEVYTLDNLNKFTQYGLVVQACNRAGTGPSSQEII 1080
                                                                                                                                                                                                                                                                                                                                                                       YAKNRIGKSEPSNELTITADEAAPDGPPQEVHLEPISSQSI 7"TWKAPKKHLQNGIIRGY 1020
                                                                                                                                                                                                                                                                                                                                                                                                       SAVNSIGQGPPSESVVTRTGEQAPASAPRNVQARMLSATTMIVQWEEPV-E-PNGLIRGY 447
                                                                                                                                                                                                                                                                                                                                                                                                                                        ITLRWIMGFDGNSPITGYDIECKNKSDSWDSAQRTKDVSPQLNSATIIDIHPSSTYSIRM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TVK-IPAMITSYPNTTLATQGQKKEMSCTAHGEKPIIVRWEKEDRIINPEMARYLVSTKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FSKGAGVPQFQPIALNGRIQVLSNGSLLIKHVVEEDSGYYLCKVSNDVGADVSK-S-MYL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                F-KDF-LP-VDPSASNGRIKQLRSGALQIESSEETDQGKYECVATNSAGVRYSSPANLYV 225
                                                                                                             SASMVFVSW 1209
                                                                                                                                                                                                                                                                                                                                     RV-Y--YTMEPEHPVGNWQKHNVDDSLLTTVGSLLEDETYTVRVLAFTSVGDGPLSDPIQ 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ITVTWDSG-NPD-PVSYYVIEYKSKSQD-GPYQIKEDITT--TRYSIGGLSPNSEYEIWV 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VGEEVISTLQILPTVREDSGFFSCHAINSYGEDRGIIQLTVQEPPDPPEIEI-KDVKART 900
                                                                                                                                                                                                          RTFDPT-TAFVVEDLKPNTEYAFRLAARSPQGLGAFTAVVRQRTLQAISPKNFKVKMIM- 615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: 212-790 707-741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1501 AA; 168336 MW; 11919615 CN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Misrock, S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein
                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Leslie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 486; DB 2: Le Pred. No. 3.52e-23; 147; Mismatches 249;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18,872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7683-043
                                                PRT;
                                                596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1501;
                                                ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40;
```

```
밁
                      Q
                                                 밁
                                                                      δÃ
                                                                                                  밁
                                                                                                                        δõ
                                                                                                                                                  Db
                                                                                                                                                                           Ş
                                                                                                                                                                                                    В
                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                             Query Match
Best Local :
                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 13,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 13, Application US/08752307B Patent No. 5952171
  340
                          469
                                                                                                                            353
                                                                                                                                                                             298
                                                                                                                                                                                                     104
                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 617-542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Gearing, David P.
APPLICANT: Levinson, Douglas
TITLE OF INVENTAGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: Meiklejohn, Ph.D., Anita L.
REGISTRATION NUMBER: 35,283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 19-NOV-
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                             MOLECULE
                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADULT
STREET: LE
STREET: MA
ASGKPKPSYRWLKNGDALVLEER-IQIEN-GALTIANL-NVSDSGMFQCIAENKHGLIYS
                                                                                                                                                                                                   SLGTIVSREAKLQFAYLENFKSRMRSR-VSVREGQGVVLLCGPPPHSGELSYAWVFNEYP 162
                                                                                                                                                                                                                             RVELPCKALGHPEPDYRW-LKD-NMPLELSGRFQKTVTGLLIEN-IRPSDSGSYVCEVSN
                                                                          AFSEKVVSPAEPVSLMCNVKGTPLPTITWTLDDDPILKGGSHRISQM-ITSEGNVVSY--
                                                                                                                           ILNPGKNVRITGINHENLIMDHMVKSDGGAYQCFVRKDKLSAQDY-VQVVLEDGTPKIIS
                                                                                                                                                  SFVEEDSRRFVSQETGHLYIAKVEPSDVGNYTCVVTSTVTNARVLGSPTPLVLRSDGVMG
                                                                                                                                                                            RYGT-AKVIGRL-YV-KQPLKATISPRKVKSSVGSQVSLSCSVTG-TEDQELSW-YRNGE
                                               VLEIPNFQQEDTGSYECIAENSRGKNVARGRLTYYAKPYWVQLLKDVETAVEDSLYWECR
                                                                                                  EYEPKIELQF-PETLP-AAKGSTVKLECFALGN-PVPQINWRRSDGMPFPTKIKLRKFNG
                          -LNISSSQVRDGGVYRCTANNSAGVVLYQARINVRG-PASIRPMKNITAIAGRDTYIHCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM:
SOFTWARE: FastSEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER:
                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                   LENGTH:
                                                                                                                                                                                                                                                                                            h 4.0%;
Similarity 23.8%;
                                                                                                                                                                                                                                                                                                                                 LE TYPE: protein 596 AA; 65965 MW; 1871085 CN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02110-2804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/08752307B
                                                                                                                                                                                                                                                                                Conservative 138; Mismatches 260;
                                                                                                                                                                                                                                                                                                                                               TYPE:
                                                                                                                                                                                                                                                                                                                                                                                    596 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 McCarthy,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IBM Compatible
SYSTEM: Windows95
                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fish & Richardson, P.C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , Douglas A.
METHOD FOR IDENTIFYING GENES
ENCODING NOVEL SECRETED OR M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US/08/752,307B
                                                                                                                                                                                                                                                                                            Score 449; DB 2;
Pred. No. 1.18e-20;
                                                                                                                                                                                                                                                                                                                                                                                                               13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09404/020001
                                                                                                                                                                                                                                                                                                        Lenyth 596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OR MEMBRANE-ASSOCIATED PROTEIN
                                                                                                                                                                                                                                                                                 Indels 32;
                                                                                                                                                                                                                                                                                 Gaps
  396
                           526
                                                                           468
                                                                                                                            411
                                                                                                                                                                               352
                                                                                                                                                    222
```

Thu

```
Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-752-307B-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 11, Application US/08752307B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     XXXXXX
  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             527 VIGYPYYSIKWYKNSNLLPENHRQVAFENNGTLKLSDVQKEVDEGEYTCNVLVQPQLS-T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 11, Application US/08752307B Patent No. 5952171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        762 GYYLCKVSNDVGADVSKSMYLTVK 785
                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: McCart
                                                         TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                       APPLICATION NUMBER: US FILING DATE: 19 NOV-1S CLASSIFICATION: 435 PRIOR APPLICATION DATA: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: McCarthy, Sean A. APPLICANT: Gearing, David P. APPLICANT: Levinson David P. TITTE CO.
                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Levinson, Douglas A.
TITLE OF INVENTION: METHOD FOR IDENTIFYING GENES
TITLE OF INVENTION: ENCODING NOVEL SECRETED OR MEMBRANE-ASSOCIATED PROTEIN
                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: Meiklejohn, Ph.D.,
REGISTRATION NUMBER: 35,
                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GKYVCMVQTGVDS-VSSAAELIVR 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GESIILPCQVQHDPLLDIMFAWYFNGT-LTDFKKDGSHFEKVGGSSSGDLMIRNIQLKHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SLLN-D--GGLKIMNVTKADAGIYTCIAENQFGKANGTTQLVVTEPTRIILAPSNMDVAV
              MOLECULE TYPE:
                                                                                                       TELECOMMUNICATION INFORMATION: TELEPHONE: 617-542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GKAVI_NCSAEGYPVPTIVWK-FSKGAGVPQFQPIALN-GRIQVLSNGSLLIKHVVEEDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TIDNIDFTSSLRISNLSLMHNGNYTCIARNEAAAVEHQSQLIVRVPPKFVVQPRDQDGIY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SQSVHVTVKVPPFIQ-PFE-FPRFSIGQRVFIPCVVVSGDLPITITWQKDGRPIPGSLGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SAELKVLASAPDFSRNPMKKMIQVQVGSLVILDCKPSASPRALSF-WKKGDTVVREQARI
                                                                                                                                                                                                                                                           OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows
                                                                                                                                                                                                                                                                                   COMPUTER:
                                                                                                                                                                                                                                                                                                                      ZIP:
                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: rish craeET: 225 Franklin Street
                                                                                            TELEFAX:
                                                                                                                                REFERENCE/DOCKET NUMBER:
                                                                                                                                                                              FILING DATE
                         TOPOLOGY:
                                                LENGTH:
                                                                                                                                                                                                                                                                                                                   02110-2804
 E TYPE: protein
612 AA; 67666 MW; 1983167
                                                                                                                                                                                                                                                                                                                                                       Boston
                                  amino acid
                                                                                                                                                                                                                                                                                                                                            ¥
                                              612 amino acids
                                                                                             617-542-8906
                                                                                                                                                                                                                                                                                                                                 SD
                        linear
                                                                                                                                                                                                                                                                                  IBM Compatible
                                                                                                                                                                                                                           19-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
                                                                                                                                                                                                                                      US/08/752,307B
                                                                                                                                         35, 283
                                                                                                                                 09404/020001
                                                                                                                                                       Anita
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                              Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               €12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       703
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                               Sequence 12, Application US/08752307B
                                                                                                                                                                                                                                                                                                                                                                                        US-08-752-307B-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    151
                                                                                                                                                                                                                                                                                                                                                                                                                                                   537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            193 YNYRCITR--HRYTGETRQSNSARLFVSDP-ANSAPSILD--GFDHRKA-MAGQRVELPC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      134 KTMRGNVAVFKCIIPSSVEAYITVVSWEKDTV-SLVSGSRFLITSTGALYIKDVQNEDGL
                                                                                                                                                                                                                     Patent No. 5952171

GENERAL INFORMATION:

APPLICANT: McCart
                                                                                                                                                                                                                                                      Sequence 12, Application US/08752307B Patent No. 5952171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    35 EELSQPPTITQQSPKDYIVDPRENIVIQCEAKGKPPPSFSWTRNGTHFDIDKDAQVT-MK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   / Match 4.0%;
Local Similarity 24.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94
              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                             APPLICANT: McCarthy, Sean A.
APPLICANT: Gearing, David P.
APPLICANT: Levinson, Douglas A.
TITLE OF INVENTION: METHOD FOR IDENTIFYING GENES
TITLE OF INVENTION: ENCODING NOVEL SECRETED OR MEMBRANE-ASSOCIATED PROTEIN
                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IAAGLPTPVIRWIKEGGELPANRTFFENFKKTLKIIDVSEADSGNYKCTARNTLGSTHHV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HVREGDSLVLNCRPPVGLPP--PIIFWMDNAFQRLPQSERVSQGLNGDLYFSNVQPEDTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PNSGTL-VVNIM-NGVKAEAYEGVYQCTARNERGAAISNNIVIRPS-RSPLWTKEKLEPN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ISVTVKAAPYWITAPRNLVLSPGEDGTLICRANGNPKPSISWLTNGVPIAIAPEDPSRKV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VDYICYARFNHTQTICQ:QPISVKVFSTKPVTERPPVLLTPMGSTSNKVELRGNVLLLEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PN-GTLQIFPFPPSSFSTLIHDNTYYCTAENPSGKIRSQDVHIKAVLREP-YT-VRVEDQ 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EDLHSSLYFVNASLQEVVFASTTGTLVPCPAAGIPPVTLRWYLATGE-EIYDVPGIRHVH
                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  WYKNSNLLPFNHRQVAFENNGTLKLSDVQKEVDEGEYTCNVLVQPQL-STSQSVHVTV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WLKDNNELPDDERFLY-GKDN-LTIMNY-TDKDDGTYTC-I-VNTTLDSVSASAVLTV 609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             YRCTANNSAGVVLYQARINVRGPASI-R-PMKNITAIAGRDTYIHCRVIGY-P-YY-SIK 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    YTCVARNKLGKTQNEVQLEVKDPTMIIKQPQYKVIQRSAQASF-EC-VIKHDPTLIPTVI 556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PVSLM-CNVKGTPLPTITWTLDDDPILKGGSHRISQMITSEGNVVSYLNISSSQVRDGGV 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SPALIDCAYFGSPKPEIEW-FRG--V-KGSILRGNEYVFHD-NG-T-LEIPVAQKDSTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NHENLIMDHMVKSDGGAYQCFVRKD-K-LSAQDYVQVVLEDGTPKIISAFSEKVVSP-AE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DGDTIIFSAVQERSSAVYQCNASNEYGYLLANAFVNV-LAE-PPRILTP-ANKLYQVIAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GRLYVKQPLKATISPRKVKSSVGSQVSLSCSVTGTEDQELSWYRNGEILNPGKNVRITGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KALGHPEPDYRWLKDNMPLELSGRF-QKTVTGLLIENIRPSDSGSYVCEVSNRYGTAKVI
                                          COUNTRY:
ZIP: 021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     149;
                                                                                       ADDRESSEE: Fish ....
street: 225 Franklin Street
 COMPUTER:
                                           02110-2804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                       æ
                                                            SD
 IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 448; DB 2;
Pred. No. 1.38e-20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches 266;
                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                         607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 612
                                                                                                                                                                                                                                                                                                                                                                                         ΑA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           388
```

```
Ŷ
                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                       ₽
                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                     В
                                                                                                                                                                               Q
                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                               В
Search completed: Tue Apr 25 13:49:26 2000 Job time: 41 secs.
                                                            ş
                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 112
                                                                                                                                                        459
                                                                                                                                                                                                                                                  331
                                                                                                                                                                                                                                                                             344 LRWGCAAAGKPRPTVRWLRNGEPL-ASQN-RVEVLA-GDLRFSKLSLEDSGMYQC-VAEN 399
                                                                                                                                                                                                                                                                                                                                             285
                                                                                                                                                                                                                                                                                                                                                                          215
                                                                                                                                                                                                                                                                                                                                                                                                         227
                                                                                                                                                                                                                                                                                                                                                                                                                                       160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    103
                                                                                                                                                                                       391
                                                                                                                                                                                                                    400
                                                             508 RPMKNITAIA-GRDTYIHCR
                                                                                                                                                                                                                                                                                                              272 QKTVTGLLIENIRPSDSGSYVCEVSNRYGTAKVIGRLYVK-QPLKATISPRKVKSSVGSQ 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Meiklejohn, Ph.D., Anit
REGISTRATION NUMBER: 35,283
REFERENCE/DOCKET NUMBER: 0940
TELECHNOE: 617-542-5070
TELEPHONE: 617-542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 607 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         match 3.5%; Score 391; DB 2; Length 607;
Local Similarity 25.8%; Pred. No. 1.00e-16;
es 129; Conservative 121; Mismatches 208; Indels 42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION UDATA:
APPLICATION NUMBER: US/08/752,307B
FILING DATE: 19-NOV-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein JENCE 607 AA; 66494 MW; 1857918 CN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LASNPVGTVVSREAILRFGFLOE-FS-K-EERDPVKAHEG-WGVMLPCNPPAHYPGLSYR 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LVPCPAAGIPPVTLRWYLATGEEIYDVPGIRHVHPNGTLOIFPFPPSSFSTLIHDNTYYC 102
                                                                                                                         LKGGSHRISQMITSEGNVVSYLNISSSQVRDGGVYRCTANNSAGVVLYQARINVRGPASI 507
                                                                                                                                                                                                               KHGTIYASAELAVQALAPDFRLNPVRRLIPAARGGEILIPCQPRAAPKAVVLWSKGTE-I 458
                                                                                                                                                                                                                                                     VSLSCSVTGTEDQELSWYRNGEILNPGKNVRITGINHENLIMDHMVKSDGGAYQCFVRKD
                                                                                                                                                                                                                                                                                                                                         TTAEPTLQIPSVSFEDEGTYECEAENSKGRDTVQGRIIVQAQPEWLKVIS-DTEADIGSN 343
                                                                                                                                                                                                                                                                                                                                                                                                                                       WE-KDTVSLV-SGSR-FLITSTGALYIKDVQNEDGLYNYRCI-TRHR-YTGETRQSNSAR 214
                                                                                                                                                                                                                                                                                                                                                                                                                                                        WLLNEFPNFIPTDGRHFVSQTTGNLYI-ARTNASDLGNYSCLATSHMDFSTKSVFSKFAQ 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAENPSGKIRSQDVHIK-AVLREPYTVRVEDQKTMRGNVAVFKCIIPSSVEA-YITVV-S 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: 617-5
TELEFAX: 617-5
TELEX: 200154
                                                                                                                                                   LVNSS-RVT--VTPDGTLII-RNISRSD--EGK-YTCFAENFMGKANSTGILSVRDATKI 511
                                                                                                                                                                                                                                                                                                                                                                           L-FVSDPAN-SAPSILDGFDHRK-AMAGQRVELPCKALGHPEPDYRWLKDNMPLELSGRF 271
                                                                                                                                                                                                                                                                                                                                                                                                       LNLAAEDTRLFAPSIKARFPAETYALVGQQVTLECFAFGNPVPRIKWRKVD-G-SLSPQW 284
                                                                                      TLAPSSA. INLGDNLTLQCH 531
                                                                                                                                                                                     KLSAQ-DYVQVVLEDGTPKIISAFSEKVVSPAEPVS-LM-CNVKGTPLPTITWTLDDDPI 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09404/020001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Anita L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                     390
```